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## THE HAVANA.

I DON'T know why, in England, we always misspell the name of the capital city of Cuba, or why we invariably omit the definite article prefix which belongs to it. However, what's in a name?—Here we are at daybreak, in the middle of October, lying off the Morro waiting for the pilot.

Our patience is not put to a severe test, and we soon turn slowly ahead in charge of old Pedro, the harbour-pilot, who, to judge by his unceasing signals to the men at the wheel, must consider the passage up the harbour a very intricate one. Now we pass under the lofty Morro, from which we are greeted by loud shouts, which we cannot comprehend, until the pilot informs us that they can't make out who we are—a piece of information quite necessary before we go any farther.

The skipper is livid with rage. What do they want? The English flag is at the peak, the Company's flag at the main, and the ship's number at the fore: what more do they want? Turn ahead again: she's drifting ashore. Still they shout.—What is it, pilot?—They say the English mail-steamer was here yesterday.—Of course she was; we don't pretend to carry the mails; we want to be docked. Well, tell them so. All right now; not for long, however. Stop her!

A white roomy gig approaches, carrying a rather ominous-looking yellow flag. She is pulled by six oars; and in her stern-sheets, covered with a fixed awning, sit three Spanish gentlemen, all dressed alike in white trousers and waistcoats, black coats, and silk hats of the highest finish and newness. One of these is the health officer, the others are his official subordinates. All correct here—a clean bill of health: turn ahead. Stop again. Another official-looking boat, larger than the last, but not so luxuriously furnished. The sitters are dressed in a uniform of what appears at first sight to be bed-ticking: it is, however, white linen or calico covered with fine blue stripes, which in the Spanish uniforms takes the place of white. A very sensible substitute too; for, while in appearance and reality it is equally suitable for tropical wear, it does not

show the traces of soil so soon. In fact, in a country where such a texture is necessarily worn all the year round, the washing of white uniforms would be a tax which would necessitate double pay to support. We take one of these gentlemen on board, who will take up his abode with us during our stay, to prevent smuggling.

There is no such thing as free trade in Cuba; everything that enters or leaves the ports must pay duty. There is even a duty on foreign letters beyond the postage. On at least one occasion, they tried to make a steamer pay duty on the copper which she discharged into the floating dock for the purpose of being recoppered herself; and were it not for the intervention of the British consul she would have had to pay it. Turn ahead once more. We thread our way through shipping of all sizes, saluting as we pass the Spanish men-of-war, who as politely dip the 'blood and gold' ensign in return. At last we have arrived safely at our buoy; and Don Carlos is already on board to know when we shall be ready to coal. We do not want any, however; and the gang of slaves with their coal-barrows will not be needed.

Don Carlos is very particular about his slaves: they must not work in the rain, if possible; the coal-wharf is kept well swept, lest, by tripping over, or treading on lumps of coal, they might lame themselves; they must have their full time for meals—in fact, Don Carlos takes as good care of his slaves as an Englishman does of his horses, and a deal better than we do of our soldiers. Of course it is his interest to do so; besides, he may be conscientious.

Slavery is wicked, and no sophistry or argument can make wrong right; nevertheless, there is—superficially—a painful contrast between the hearty, merry, fat Cuban slave, and the listless, weary, indolent, free negro of Jamaica. Judging from external appearance, one would say that the evils of slavery are more moral than physical, and that regular enforced labour must have some beneficial effects, whether applied to an idle school-boy or an idle negro.

Whilst we are having breakfast on deck, we may

as well take a look through the glass at this city of cigars. Built in the old Spanish style, every house fit to stand a siege, it stretches about four miles along the western shore of the gulf that forms the harbour, which it shelters to seaward: thus the harbour is situated behind the town. The opposite boundary of the harbour is a high ridge or cliff, also separating it from the sea. This cliff is surmounted with fortifications its whole length, terminating in the Morro, or round tower. Thus sheltered, the harbour of the Havana is said to be one of the safest in the world, and has anchorage for a thousand keels; \* but— 'The cutter's alongside, sir.'

We must be off. We pull for the custom-house wharf, which is about a mile and a quarter from where we lie. 'Way enough;' 'Out oars;' and amidst custom-house officials, police, soldiers, and watermen, all smoking cigars, we make our way into the city.

La Plaza?—Yes, sir; La Plaza is quite close. There is nothing very imposing about it, although styled La Plaza Real. It is a small square, ornamented with cabbage-palms, and the official residence of the Captain-general; and of these structures the palm trees have decidedly the advantage.

La Dominica. Yes, that is something more to the purpose in the tropics. Passing out at a corner of the Plaza, through a couple of streets, one of which (Calle O'Reilly) is honoured by the name of an Irish hero, we enter the Dominica. Why a house especially devoted to the manufacture and sale of sherry-coblers, mint-juleps, and ice-creams, should be called Dominica (Sunday), history does not inform us. Perhaps it is because it is a place of rest, which it no doubt is, and, on a hot day, a most agreeable one.

Let the reader who has been broiling for three or four hours under a July sun in the hot streets, imagine a large lofty room, lighted from above in such a manner that light without heat is admitted; a floor of white marble, in the centre of which is a fountain of cool water, playing amongst the fronds of green ferns and water-lilies; whilst here and there along the walls, caged mocking-birds trol forth thrilling notes of most delicious melody. Let his imagination carry him to any one of the hundred or so small white marble tables scattered around, to which a waiter, clad in pure white from head to foot, has just brought two large clear glasses, one containing a compound of crushed ice, sherry, sugar, and sliced limes, and the other piled with rocks of cold clear crystalline ice itself. Let him imagine this, and he has the Dominica. For the first glass—a sherry-cobler—you pay; the second is only iced water. Only iced water! Oh, if we could only get iced water thus in hot, dusty London! And yet the preservation of ice in London would be much less difficult than in a

tropical country! As we sit sucking our coblers, or revelling in lumps of frozen water, we amuse ourselves scanning the visitors as they drop in.

To English eyes they seem more or less brothers. There are the same black crisp beards and close-cut hair, the everlasting cigar, the same white trousers and waistcoat, the same polished black hat, each looking as if it were the very last the latter had finished. The coat alone permits of a little variety, and thus we are enabled to distinguish individuals. Occasionally, Brother Jonathan forms one of a group; there is no mistaking him, with his goatlike beard, and face of india-rubber elasticity. The cobbler or an ice-cream seems to be the favourite refreshment, though occasionally a chocolate is preferred. Whatever it may be, it is always accompanied by a glass of iced water. And such chocolate! it would be impossible to describe it; one must go to the Havana to know what genuine chocolate is. Amongst the visitors that frequent the Dominica is the ubiquitous vendor of lottery tickets. He is represented in the present instance by a grotesque dwarf, not quite three and a half feet in height, with a head as large as two of ordinary size.

The Havana lottery is a genuine concern, and curious as it may seem, often a paying one to a regular investor. One gentleman told me that he invested 500 dollars a year regularly, and that now, after ten years, he found that he had cleared 10,000 dollars (over £2000 sterling). The drawing is bi-monthly, at which about 225,000 dollars are distributed in prizes; the grand prize being 100,000 dollars—quite a little fortune to the winner. The tickets are sold at sixteen dollars each; but one-eighth part, or any number of eighths, can be bought. The value of the tickets is one-fourth more than that of the prizes, that is to say, three-fourths of the value of the tickets is distributed in prizes. The unsold tickets belong to the government, and have their chance of winning prizes. The drawing is conducted on the strictest principles of fair play.

The day being advertised, the officials and the public assemble in a large room, where, elevated on a platform, stand two negro youths, stark naked; at the side of each is a box, with a hole in the top sufficiently large to admit the boy's arm. These boxes having been first, in the presence of the public, twirled and turned so as to insure complete shaking of their contents, one of the boys dips his hand into the box beside him, and draws forth a card, which he holds over his head, so that all can see it; on it is printed in plain figures a sum of money, which represents one of the prizes; an official cries aloud the amount, which is entered by another official in a large book. This being done, the other naked youth goes through the same performance with his box; his card bears a number which, after being exhibited to the crowd, is entered opposite the first entry. The lucky owner of the lottery ticket bearing that number is certain of his money, whether he be in Havana or China.

\* In spite of this shelter, in the great hurricane of 1842 (?), three hundred ships of all sizes went down inside the harbour. Two only escaped destruction, a small schooner and the mail-steamer from England.

What between the profits, which represent one-fourth, and the dues on the money paid away, the government realise a handsome sum yearly—seldom less than L.400,000 sterling.

Having sufficiently refrigerated ourselves, we inquire what is the best way of seeing the city. A volante or the tramway are, we are informed, the usual modes of conveyance. We are not quite certain what sort of an instrument a volante may be, until a waiter hails one for us, and then we see that it is a gig that has apparently been drawn through a pipe; the strain having so lengthened the shafts as to render it a question at first whether the quadruped between them has any connection with the vehicle; and the wheels, having evidently offered the greatest resistance, follow a long way behind; whilst the body, squeezed and flattened, is moulded into a lanky perambulator of adult dimensions. Nor is Jehu and his Rosinante a whit less remarkable. The former, with silver-corded sombrero, silver-studded jack-boots, and silver-buttoned jacket and breeches, sitting in his high-peaked, silver-mounted saddle, reminds one of the conventional brigand, minus the plume in his hat, or one of the Arrieros depicted in the illustrations of *Gil Blas*; whilst the latter, plaited as to his tail and mane—the tail being looped up to his harness—might pass for a new species of the equine race, got up for an exhibition in the Holborn Circus. In spite, however, of the peculiarity of the concern, it is most comfortable to travel in, as it is free from the slightest jolt, swinging as it does on long slender springs, supported between the wheels behind and the horse in front. The private volantes are sometimes got up very handsomely, and are generally drawn by two horses; one in the shafts, and another neither abreast nor in front, but about half-way in advance; the head of the shaft-horse being even with the postilion's leg, who rides the leader.

As we drive through the streets, we are struck by their extreme narrowness, the footpaths not exceeding two feet, and the roadway between just sufficiently wide to allow two vehicles to pass, axles touching. Tobacco and garlic are the prevailing perfumes, the manufacture of the former into cigars being carried on in shops of all sorts and sizes, from Cabaños' monster establishment, where they prefer not taking an order for less than ten thousand, to the little dirty cellars where you can buy a single cigar. Very dirty hands, filthy paste, and the occasional use of the saliva, make one resolve for the future to use a cigar-holder.

There is a saying amongst English-speaking visitors to the Havana, that it costs a dollar to open one's mouth, and two to shut it, which, when the charge for hair-cutting is three-fourths of a dollar, and the price of a pair of indifferent white kid gloves is two dollars, seems not to be far from the literal truth.

Car-hire within the limits of the city is the only thing that can be called moderate, and is no doubt due to the competition between the tramway and the cabs (volantes). The tram-cars starting from near the chief landing-place, pass through the principal streets for a distance of nearly five miles, and the fare for this is only one dime (fivepence). During the busy part of the day, they run every ten minutes, and, at other times, every quarter of an hour.

A few minutes through the narrow streets bring

us to the boundary of the old part of the city; and passing beneath a battlement and across a dry moat, where a sentry is on guard, we get into the newer and more open and less odorous part of the town. Through a pretty ornamental square, in the centre of which stands a statue of Isabella, we drive to the Paséo, the Rotten Row of the Havana. It is empty now, but about five in the afternoon will begin to fill with dark-eyed beauties. Elegantly equipped volantes, and splendid American wagons, like the skeletons of deceased vehicles painted and varnished, will be filled with clouds of gauze and black mantillas: hats or bonnets are of course unknown. Unlike our English society, which is never complete without a mingling of the sexes, the Cuban ladies have it all to themselves as far as the driving is concerned, the gentlemen's part being to saunter along the side-paths, bowing and gazing at the fair ones as they pass and repass.

We have promised to lunch with a friend, and after some little difficulty, find his house. At first, we fancy we must have made a mistake, as entering through a mighty archway, which might have done service for a palace, we find ourselves in a marble-floored hall or vestibule, in which is a carriage. A livery-stable? No; here comes our friend.—We make our carriage part of our house-furniture in Havana, he explains. Having placed himself, his wife, children, house, and all it contained at our disposal, he proposes a drink, which latter we accept. Short or long? We choose a short drink, a sherry-bitters, which, for the benefit of those who wish for an appetiser, is composed of dry sherry iced almost to freezing, flavoured with Dr Seigert's famous Angostura bitters. We are introduced to the señora, who is young, pretty, and smiles sweetly, but says little; she is, however, very polite in her manner, and seems happy in shewing hospitality to her husband's friends.

They have in the Havana a very pretty method of sociability, which consists in having reception-evenings. On these evenings, of which each family has one a week, the house is open to guests. There are no invitations sent, nor is there any preparation made for their reception; neither is there any supper or refreshments, except wine, brandy, and iced water on the sideboard, where the thirsty refresh themselves without ceremony. Dancing, of course, is the occupation of the evening. People who are fond of this amusement go out every evening during the season, except on their own reception-night. Friends, too, are at liberty to bring their friends, and thus sometimes quite a crowd meet without a single guest being specially invited.

Our host makes up for his wife's deficiency in colloquial art. The new Captain-general seems at present to be the burden of conversation everywhere. Is he liked? Well, no; he's not. The fact is, he's too honest; he's not open to bribery, nor will he allow those under him to take bribes, if he can help it. It was only the other day that he returned a pair of American carriage-horses, worth four thousand dollars, if they were worth an ounce, to a rich planter who had sent them a present to him, with a message, that sooner than accept them, he would walk for the rest of his life if necessary. A bribe? No doubt about it. All the planters carry on the importation of slaves on the sly when they have the chance, and he's bent on stopping it. Why, he goes about the city in

disguise, to see who he can catch napping. A few nights ago, he made a complaint to one of the police inspectors, asking him for protection; but he was shabbily dressed, and offered no bribe, so he was only laughed at. The next day the inspector was summoned to the office of the Captain-general, whom he at once recognised as the suppliant of the previous evening. He went down on his knees to ask for pardon, but he might as well have besought the wall: he got a short lecture on the heinousness of his conduct, and was shut up in the Morro. Oh, there's no nonsense about him! But amongst all the stories I have heard about him, this is the best. He went the other day to visit one of the monasteries. It is a tremendous building, quite out of all proportion to the number of its inmates. He was, of course, welcomed most graciously by the abbot and brethren; and, as is customary, the house and all that it contained was placed at his disposition. Caramba! if he didn't take them at their word; for a few days after he sent a message thanking them, and saying that the troops were very badly lodged; that their house was much too large for them, but would make an excellent barracks; and finally, he gave them three days to clear out, bag and baggage. Resist? No, they knew better; he'd have shut them up in the Morro: he doesn't care a snap of your fingers for a priest.

From the Captain-general, we wander to slavery, which we discuss in all its bearings. Our host is opposed to slavery on principle, but says its abolition would be the ruin of Cuba, unless it was effected very gradually; and though he agrees that *fiat justitia ruat cælum*, he evidently would prefer the crash to come when he has made his fortune, not before. Promising to go with him to the next bull-fight, we take our leave, when his house is again placed at our disposal; quite a little income in itself, we may mention, as rent and taxes amount to seven hundred pounds a year. As it is a house of ordinary dimensions, an estimate may be formed of house-rent in the Havana.

Having a few other friends to visit, it is late before we turn homewards. As we drive slowly along, the private houses begin to light up. There is very little privacy, and less domesticity, amongst the Cubans. Spanish ladies love a certain amount of publicity; and when we in England would have shut shutters or drawn blinds, they throw open their houses to public view. The drawing-room windows opening to the ground, display groups of ladies sitting in rocking-chairs fanning themselves. How do they employ themselves? may be naturally asked. Well, they sit in rocking-chairs and fan themselves; they don't even appear to converse; an occasional word now and then breaks the silence, or rather the fluttering of the fans, and that is all.

Now we are again in the narrow garlic-scented streets, where we discharge our cochero, who modestly asks an ounce (sixteen dollars) for his day's service, but goes away well satisfied with a five-dollar gold piece.

The streets are now well lighted, and crowded with saunterers, all of the male sex. About eleven o'clock they begin to empty, and by midnight few are to be seen except the watchmen, who patrol the streets, armed with a weapon somewhat resembling an ancient battle-axe, and carrying a large lantern. Then the night-cars begin to go their

rounds, collecting the refuse of the houses, which is left in a box or barrel outside each dwelling. It is not safe to wander through the Havana late at night, so we find our way to the wharf, where, rather weary after our ramble, we are glad to find our boat awaiting us.

## WON—NOT WOODED.

### CHAPTER VII.—DANCING ATTENDANCE.

LIFE at *The Grand* begins betimes in the morning, for there are some who believe that a few drops of nasty water from a spa, if taken before breakfast, will repair a shattered constitution, and even refit it for another voyage upon the ocean of Excess; very early, therefore, a straggling procession of shaky folks is seen issuing from the hotel portals, and betaking themselves to the Temple of Hygeia, a damp well, with a couple of spigots in it, each of which is a fountain of health. The one on the right hand is a sovereign medicine for the liver; that on the left is equally efficacious for the spleen. Amongst this woe-begone crowd may be observed not a few young people afflicted with disorders of the affections, who find the spa a convenient spot for meeting with their beloved objects. Glass in hand the bashful maiden, glass in eye the enamoured swain, wander about the undulating and many-seated 'grounds,' which the corporation of Shingleton has laid out at a great expense, ostensibly for recreation, but in reality for this very purpose. The undulations are little knolls embowered in trees, and, like the seats, adapted for two persons only. For Shingleton-on-Sea is one of the great matrimonial marts to which the fashionable of both sexes repair when London is a desert: the flirtations which have formally received the paternal or maternal consent are carried on here every afternoon to the soft music of the spa band; but those in embryo, or which are regarded by the domestic authorities with disfavour, are pursued in the morning only, under favour of Hygeia. To say of a young lady at Shingleton that she takes the waters early, is to hint that she has a clandestine attachment; while in the case of a young gentleman, the simple phrase 'He has a liver,' has a signification with his rude companions beyond its mere anatomical truth.

The early visitors to the spa are, however, but few in number compared with the rest of the inmates of the hotel, who are for the most part late sitters and late risers. The breakfast epoch for those 'upon the establishment' ranges from nine to eleven, and that meal, in the private sitting-rooms, is sometimes served at an even later hour.

The Pennants were no sluggards, yet Mabel Denham, fresh from the country parsonage, and accustomed to early hours, found, on her descending to their parlour, a chambermaid sweeping the carpet, and not even the breakfast-cloth laid. It was but natural, then, that in order to escape the dust and the coming waiter, she should come out into the balcony, where the sea-breeze was blowing freshly, tossing the boats, and creaming the waves and giving life to every object. How delightful everything looked, and was, thought she, at Shingleton! How pleasant it must be to be rich, and able to live at such a place as *The Grand* all one's life! (The Pennants were not rich, but during our honeymoon we can afford to be a



little extravagant, or we have no business to marry at all.) How nice everybody was she had yet seen, and how anxious to please her! Mrs Marshall, it is true, was rather talkative, but then she was very good-natured. That dear old Professor had quite won her heart; he was so kind and gentle, notwithstanding all his learning; and really Mr Winthrop had been very civil, though Frederick had said last night, when his opinion was asked about him, that he was 'a beast.' Frederick was charming, only his expressions were a little strong when he was put out; and he *had* been put out—upon *her* account, dear fellow, not his own—by that stupid man's interrupting her song. How foolish of her it had been to stop and be so frightened! Why, as Mrs Marshall had said, 'the man had only expressed his pleasure at the performance, though in a vulgar way; and it certainly would have been a much more disagreeable thing if he had hissed.'—How beautiful that yacht looked coming out of the harbour, with its great sails shining like angel's wings! But how very much on one side it was. She would have liked it to keep straight and safe. And why were the sails of the fishing-boats all red? Perhaps to save washing.—How far the sea stretched! Limitless as Eternity itself. How bright, and pure, and sparkling, as though it felt the smile of Heaven! How easy it must be to be good with such a sight always before one! How early people began croquet.—No; it was only a young man knocking the balls about with his foot.—Good gracious! what *was* she to do? He had actually taken off his hat to her! Ought she to bow?—for she saw it was Mr Winthrop's son—or to go in-doors at once? She did neither, but only blushed exceedingly, and stared out to sea—not to see *him*. He had a very bold disagreeable look, which she did not wish to meet again. She hoped he was not to accompany them in their expedition that day, for Frederick had taken even a greater dislike to him than to his father. He was still looking at her, with his hat off, and it made her very hot and uncomfortable. But she would not be driven in by his rudeness, nor notice it in any way.

'A silver sixpence for your thoughts, Miss Mabel,' said a voice so sudden and so close beside her, that gentle as it was, it 'made her jump.' But she was delighted to find the Professor at her elbow, in such trying circumstances, and welcomed him with grateful eyes.

'I was looking at the light-house on that far promontory,' said she, 'and thinking how nice it must be to live there all alone.'

'That was a very cruel thought, my dear young lady,' said Mr Flint, unconscious of the fib; 'but still, here's the sixpence.'

'But that is not a sixpence, nor a silver coin at all: it is a gold one.'

'Yes, because you cannot hang a sixpence on to your chatelain, where I wish you to hang this. It is a Celtic ornament, and may, for all we know, have been some maiden's amulet more than a thousand years ago. If my good-will could endow it with magic charm, care should never furrow that happy brow of yours. Will you wear it for my sake?'

'Indeed, I will, Mr Flint. But the coin is so pretty—and doubtless rare—that I hardly like to rob you of it.'

'It is very old,' said the Professor gravely, 'and

therefore the more fit to remind you of the giver.' There was a short pause, during which Mabel caught once more the noise of the croquet balls, and blushed. Mr Flint also heard it, and looking down, recognised the younger Winthrop.

A frown passed over the Professor's face, followed by a look of ineffable sadness. He had lived so wholly among men, and heard so much of their lying talk of women, that for a moment he half believed that this bright innocent creature was in the balcony by design, because Horn Winthrop was on the lawn.

'The light-house you were thinking of is farther than it looks, Miss Denham; but it is not far from the spot for which we are bound this morning. When you are tired of our antiquarian researches—which doubtless you soon will be—we will visit it.'

'I should enjoy that of all things,' said Mabel. 'There has always seemed to me something almost sublime about a light-house, where folks watch, while others sleep, to warn their fellow-creatures of peril.'

'What a pity it is,' mused the Professor thoughtfully, 'that there are no light-houses for landsmen and landswomen—no sleepless eye to warn them of shoal and rock—of the Shallow and the Cruel! at least save the eye of God,' added the Professor reverently: 'may *that* watch over you, young lady, and guard you always from all harm.'

There was a gravity in Mr Flint's manner which, while it convinced Mabel of the genuineness of his regard, depressed her. Even the best of us, when we are young, are somewhat of Dame Quickly's opinion, that there is no need to speak of serious matters yet; and it was a positive relief to May when her brother-in-law appeared at the open window, summoning her to breakfast, and denouncing her for flirting with Professor Flint instead of attending to the tea-pot.

They had a very merry meal, during which the Celtic amulet did not escape Mrs Pennant's observant glance, and was the cause of a great deal of raillery on the part of her husband, who professed to see in it all the signification of 'an engaged ring.'

After breakfast, an open carriage was ordered for the party of the previous evening; the Professor sitting inside with the ladies, and Frederick on the box. Mr Winthrop, accompanied by his groom, was on horseback. He rode close to the vehicle, and always—as Mrs Marshall remarked to herself with intense satisfaction at her own sagacity—upon that side of it on which Miss Denham sat. It was all nonsense that his presence was necessary there to direct the driver to their destination. He was an excellent horseman, and the steed he rode excited even Mr Pennant's admiration. His hat, on which was a slender band of black, concealed his slight baldness, the only evidence of age which his appearance exhibited; and he looked scarce five-and-thirty. It was difficult to conceive of him that he was the father of the tall swarthy youth who was lounging on the hotel steps as they took their departure, and to whom he hurriedly introduced them as they started. He made himself as agreeable as the circumstances permitted, which were certainly not favourable for conversation. Equestrian exercise never is, which is doubtless the reason why great talkers seldom use it: the clatter of hoofs and the rapid motion are incompatible with the interchange of intelligent ideas, and the wisest man, when he

mounts his horse, becomes either commonplace or dumb. This is especially the case when the rider has to discourse with others who are on wheels; what he hears is half rumble; he is blinded by the dust, or smacked on the cheek by the mud of the road, which sticks there, and renders him ridiculous; he has to break off in the middle of an eloquent sentiment because the way grows narrow; or he meets a wagon, and by the time he has resumed his place, and concludes his sentence, he finds his hearers have either forgotten his existence, or are talking of something else, or have taken advantage of his temporary absence to turn his opinions into ridicule. Finally, the horse, even if it is 'a clever horse,' is one of the stupidest of created animals, and is almost certain, if the chance is offered, to 'bark' either his own leg or that of his rider against a wheel.

Mr Winthrop, for example, who is full of social anecdote this morning, has a capital story to tell the ladies about the clergyman of Shingleton. 'The living, you know' (bump, bump, and a twig of a tree in his eye), 'is in the gift of Lord Muscat. 'Lord Muskrat,' says Mrs Marshall; 'what a funny name!'

A butcher's cart drives Mr Winthrop into the rear before he can set right this mistake, which renders his story ridiculous at starting, and spoils the point.

'Lord Muskrat belongs to the Shrew family,' remarks the Professor gravely. 'They possess the peculiarity of having webbed feet.'

'Bless my soul, Mr Flint, you don't say so!' cries Mrs Marshall. 'Now, that's very curious. The Winthrops themselves, as I was telling Mrs Pennant last night, have also something very peculiar about them. Their fingers are not exactly webbed, but — But here he comes again.'

'Lord Muscat is the patron of the living,' explains Mr Winthrop, flushed with exertion, and out of humour with his horse, who is worried by flies; 'and when it fell vacant the other day, he gave it to the present rector, under the following circumstances.'

The circumstance immediately following was a mail-cart, coming up at twelve miles an hour, which drove Mr Winthrop forward at a canter, and postponed the narration for full a minute. In the meantime the conversation was turned upon letter-carriage in the present day, the speed of which the Professor is contrasting with that in vogue during his boyhood, and the company are just getting interested in an illustration of slow delivery, when Mr Winthrop strikes in again, with: 'It was in a church at Bethnal Green—you have heard of the *Beggar of Bethnal Green*, Miss Denham—that Muscat heard him preach. He was doing somebody else's duty there, being what I believe is called a hack parson.—Hold up, will you, you stupid beast!' (this through his teeth to his horse, who had nearly come down upon his nose)—'and Muscat was delighted with him—liked his sermon immensely, because it only lasted five or six minutes, and after service thus addressed him: "I am Lord Muscat; the living of Shingleton, which belongs to me, is vacant. In all probability, I shall give it to you; but I live there myself, so you must let me see your wife."'

Here the road narrowed, and Mr Winthrop had to retire again, leaving everybody very uncomfortable.

'I hope he is not going to tell us a gentleman's story,' whispered Mrs Marshall to Mrs Pennant.

Nobody else spoke; all remained in a state of tension and embarrassment until Mr Winthrop once more appeared. 'I think it was so nice of his lordship,' said he, 'to find out first, before giving the man the living, whether his wife was a lady or not; it shewed such consideration for society.'

'I don't think it shewed much consideration for the clergyman's feelings,' observed Mrs Pennant.

'One pockets one's feelings when one pockets twelve hundred a year,' answered Mr Winthrop; 'that is,' added he hastily, perceiving Mabel's look of displeasure, 'it is only too usual to do so.'

There are few things more difficult than for a cynical man of the world to ingratiate himself with an honest young girl who has a sense of justice; the caustic speech which long use has rendered natural to him is not only unappreciated, but unwelcome to her, and he needs all his intelligence to repair the errors of his own wit. Mr Winthrop was a cynic to the back-bone; he had been all round the world, and found it 'a very small affair'—not too large, indeed, to have been made solely for his private pleasure and advantage. The misfortunes of others, so long as they did not affect himself, failed to depress him or distress his mind; and he took the utmost possible care of his constitution; but still he was not quite the man he had been. The bald spot on the top of his head affected his spirits. He would have devastated a province, if by so doing he could have restored that little handful of hair; not from vanity, but because its loss perforce reminded him that he had passed the table-land of middle life, and was beginning that long descent, every step of which is a bathos; the pleasures of life had begun to pall with him, and, as usual, sarcasm had taken the place of youthful spirit. He knew that this was a sore impediment in the way of ingratiating himself with a young girl like Mabel Denham; but he had never yet failed in an attempt to make himself agreeable to the other sex, and he was surely not yet too old to succeed in this case. To fail would not only be a disappointment—it would be a catastrophe, for it would convince him of his own decline. It was bitterness to him to have to swallow his bitter words, and to affect sentiments he despised; but to have to acknowledge to himself that he was no longer young, would indeed be gall and wormwood. Mr Winthrop hated hypocrisy, because it gave him trouble, and lying, because it was a strain upon his memory; both of all kinds was distasteful to him; but having once set his mind upon the attainment of any object, he was prepared for sacrifices that would have been shrunk from by many a less selfish man.

#### CHAPTER VIII.—A PROPHETESS OF EVIL.

'We are nearing our destination now, ladies,' cried the cavalier, as the road began to dip, and then to follow the windings of a shallow stream.—'There is the hill, Professor, of which I spoke; and half-way up it is your treasure-house. As luck will have it too, there are a couple of men at work yonder, whom we may impress into our service.—George' (this to his groom), 'gallop off to those fellows, and bid them come down here.'

The groom obeyed; and the 'fellows,' by no means unwillingly, left their field-work—they had

been digging up roots—and came down to the carriage with axe and spade.

'Are these the same poor men, Mr Winthrop, whom you saw before?' inquired Mabel in a low voice.

'To be sure, to be sure,' answered he eagerly. 'Here; you remember me, my men. I gave you a shilling the other day for an old bone; well, here is half a sovereign for you—since this young lady here thinks you deserve it—and if you will dig for us where we tell you, you shall be paid for your services besides.'

'A very satisfactory arrangement for everybody except their own master,' observed Frederick drily. 'Moreover, as a matter of fact, you have no more right to dig on that hill without permission, than to break into its proprietor's house.'

'Stuff and nonsense!' ejaculated the Professor, contemptuous of this technical difficulty. 'Let us have none of these frivolous and vexatious objections.—Set to work, my boys, set to work.'

The 'boys,' who were about his own age, and prematurely bent with that primeval agricultural curse, the rheumatics, shouldered the implements on which they had been leaning, and began slowly to climb the hill. Mr Flint descended from the carriage with alacrity, and before Mr Winthrop, who had by this time dismounted, could interfere, had handed Mabel down, and offered her his arm.

'Come along, Ju,' said Frederick, jumping down from his perch, and opening the door upon the other side, for her to alight; 'a man must cleave to his wife, saith the Scriptures.' So Winthrop of Wapshot had perforce to content himself with Mrs Marshall.

The object which they were now approaching appeared a sort of niche of about seven feet long, and very narrow, which had been disclosed but the day before by the removal of a tree-trunk. It was 'a bit of a squeeze,' as Mrs Marshall observed, to push through this opening into the cave beyond; and when you had done so, it was that lady's opinion that it was hardly worth while to have 'gone through so much to see so little.' There was hardly light enough, in fact, to see anything; but the Professor, who was used to such explorations, and had the eyes of a cat, expressed himself more than satisfied with the exploration. This cave, the opening of which had so long been hidden by a debris of stones and vegetable earth, was in the solid rock, and perfectly dry and cool. The flooring was of 'made ground,' and quite intact, save where the men had been digging on the previous day. Mr Flint was shewn the exact spot where the precious bone had been discovered, and stooping down and groping in the half-light, his own fingers came upon some object, which caused him to utter a sharp cry.

'What is it?' was the universal inquiry.

'Let us get out into the light and see,' quoth the Professor. His hand was bleeding, but his thoughts were far too occupied to observe it. The gravity of his face was lighted up by a look of intense triumph. 'Do you see this weapon?' cried he, after a short silence, holding up what he had found.

'I see a stone with a sharp point,' said Frederick.—'Ju, my dear, you always carry court-plaster about with you, I know; give a bit to the Professor.'

'It is nothing less than a flint knife!' exclaimed

the latter exultingly, and without noticing this benevolent suggestion. 'Look where it has been wrought and chipped! I have seen hundreds of them, and cannot be mistaken.—My dear Winthrop, I congratulate you; this discovery is of incalculable value. I make no doubt that this cave was a human habitation in pre-historic times. It shall be known to science by your own name, as Winthrop Cavern.'

'You are very good,' replied that gentleman, somewhat precipitately; 'but I beg you won't. I am really not deserving of that honour.'

'It shall be henceforth known as Winthrop Cavern,' reiterated the Professor solemnly.

'Well, I only hope you may prove right, that's all,' murmured the recipient of so much honour; 'because if it turns out to be nothing particular, it will make me very ridiculous.'

'Nothing particular!' roared the Professor. 'Is it nothing to reflect that until yesterday that home of primeval man may not have been looked upon by his fellow-creatures for thousands of years! Is it nothing that in that cavern, into which have just been admitted the rays of our summer sun, he found warmth and shelter from the inhospitable and glacier-covered earth, and from a climate compared with which that of the Arctic regions may be called temperate! I tell you that if a human bone should be discovered in yonder place, it would be worth its weight in gold. It would prove that in the same epoch as that of the Cave Bear—'

'Here's a boar-pig's tooth for you, sir,' said one of the labourers, coming out from the cave, where he had been assiduously digging within, while the Professor had been haranguing without; 'and it's a good big un too.'

'Impossible!' cried Mr Flint with an uneasy frown; 'the pig had no existence before the diluvial inundation. Give it to me, my good man.—Why, gracious powers, this is the upper molar of a bison!'

A child with a new toy, a miser who has found a sixpence, a maiden in whose ear her lover has just breathed his welcome passion for the first time, are faint types of the Professor's joy as he gazed upon the misshapen bone.

'What is that he says, my dear, about a mole and a basin?' whispered Mrs Marshall.

'Hush!' said Mabel; 'listen!'

But the Professor was speechless, wrapped in veneration of this relic of antiquity, out of respect to which he had actually taken off his hat.

'Is a bison more wonderful than a Cave Bear, then, Mr Flint?' inquired Mabel deferentially.

'Not at all, my dear,' answered the Professor; 'but the point is, that this has been found *in situ*, and under my very eyes: the other bone I had only Mr Winthrop's word for, and he might have stolen it from a museum, for all I knew.'

'Very true,' observed Mrs Marshall, with that welcome which is always afforded in a scientific inquiry to an observation that one can thoroughly comprehend.

'Upon my word!' remonstrated Mr Winthrop.

But Mr Flint, quite unconscious of having given offence, pursued his self-congratulations. 'These precious relics are like ghosts,' said he, 'they so rarely come to us, except at second-hand. Such good fortune as this befalls a man but once in a lifetime.—Give me the spade, and let me dig for myself.—And do you, ladies and gentlemen,



please to stand aside, and let the light help my old eyes as much as it can.'

So the Professor worked away in his shirt-sleeves within the cave, every now and then coming forth excitedly with some new wonder, which, however, to the ladies at least, required his explanation before it could be recognised as such; for stones unset, and bones in need of setting, have little significance to the uneducated eye; and what are called 'flint weapons' of the pre-historic times, seem to differ little from that historic one with which David slew Goliath.

After an hour or two of watching and listening, the interest of the spectators flagged a little; the heat in their exposed position upon the treeless hill was also somewhat trying; and with their pre-historic dreams began slowly to mingle the idea of lunch.

It was felt that the Professor would regard any interruption of his occupation as a sacrilege, and Mr Pennant was, by common consent, deputed to break this delicate subject.

'My dear Mr Flint,' said he, 'have any of those bones in there got meat upon them?'

'Meat? Of course not,' answered the palæontologist contemptuously. 'But observe how the long bones have been broken, with the object of extracting the marrow. When we get home, I will point out to you notches in them, which prove the flesh has been cut off by some sharp instrument; there are also traces of the action of fire.—Ah, only see what I've got here!' Here Mr Flint emerged from the cave, bearing in his hand a small and sharpened object, which he regarded with the air of one who has, at all events in this world, nothing more to wish for. 'There is only one such another,' cried he; 'and that is in the Museum of St Germain. This is certainly the whitest day in the whole calendar of my life!'

'But what is it, Professor?' inquired his audience, once more stimulated into interest by his impassioned air.

'It is nothing less than a whistle!' exclaimed he excitedly.

'A whistle!' echoed Mrs Marshall, collapsed with hunger and disappointment. 'Why, what of that?'

'What of *that*, madam!' retorted Mr Flint indignantly. 'This is the knuckle-bone of a reindeer's foot, bored with a hole, with the evident and express purpose of emitting sound.—Miss Mabel, here he turned to the young girl, with the earnest pleasure of some munificent benefactor, 'put your pretty lips to this, and blow, my dear, blow.'

The object thus presented was not an attractive one, and to say truth, much resembled a mutton-bone that has been recently rescued from the dust-heap; but May did as she was bid with a good grace, and succeeded in producing a shrill sound.

'The last person that used that instrument,' said the Professor solemnly, 'died probably no less than ten thousand years ago, and the echoes which it awakened were cast back from walls of ice.'

The idea was really a grand one, and a silence followed the expression of it for some moments.

'Had they anything to wet their whistles with in those days?' inquired Frederick demurely.

The Professor looked so indignant at this ill-timed pleasantry, that Mr Pennant hastened to explain that the ladies stood in need of lunch, and had commissioned him to say so. There was a

village near called Hillsborough, close to the light-house, and food could doubtless be procured there.

At first Mr Flint was immovable; he was not to be seduced from his post by all the flesh-pots of Egypt; let lower natures act as they pleased; but as for him, he was not going to leave this temple of antiquity even for an hour. He might possibly be upon the brink of some great discovery. Never yet had a whole skeleton, or even an entire limb of the skeleton of a man, been disinterred in any primeval cave, and Winthrop Cavern might be the first to present this unparalleled prize. It was true that nobody knew of the existence of the cave at present beside themselves; but your true *savant* has the scent of a vulture for such matters, and is always a rogue concerning them. The temptation to build on another man's foundation, or rather to continue his excavations, was too tremendous for human nature to resist; and if Huxley or Owen—

'But, my dear Mr Flint,' interposed Mabel pleadingly, 'you promised to take me over Hillsborough light-house yourself, remember.'

'Did I, Miss Mabel, did I?' sighed the Professor. 'Well, I must keep my word, then. O dear, O dear!'

So the labourers were left on guard, with strict orders to admit no one, though it were the proprietor himself, into the cave; and above all, touch nothing till Mr Flint's return—a command which they very readily promised to observe; they had too much to do with 'boans and muck,' they said, to be anxious to meddle with them without need.

'What are you waiting for, Mr Winthrop?' asked Mrs Marshall a little impatiently, as that gentleman, to whose care she had once more been consigned, tarried on the hill-top (while the rest trooped down to the carriage), and gazed anxiously down the road by which they had come.

'I sent my servant back to Shingleton for something,' murmured he; 'but I suppose these men here will direct him on.'

'Yes, yes; of course they will. Do, pray, let us come along. I protest I would give all the precious relics that have been found to-day for a mutton-chop, though it was cut from the neck; and *what* a difference there is between the neck and the loin, is there not?—Now, my dear Miss Mabel, if you're tired of sitting with your back to the horses, pray, say so; it's quite indifferent to me, and I know that it makes some people quite sea-sick.—Very good; then we'll sit as we were. I wonder what sort of a place is Hillsborough.—Driver, driver, is there a good inn?'

The driver answered that there were two inns, *The Ugly Duck*, and *The Hillsborough Arms*—'much about the same' as to goodness; there was 'not a ha'porth to choose between them.'

'I suppose we shall get ham and eggs there, at all events, eh, driver?' continued Mrs Marshall, pursuing her inquiries with a certain liveliness and relish, after the long silence which she had perforce maintained during the late scientific investigation.

'Well, ma'am, that will just depend on whether they keeps pigs or fowls,' was the abrupt reply.

Mrs Marshall's cross-examining manner, although she especially piqued herself upon it, was not a popular one with servants, and now and then, as



in this case, it produced rather embarrassing rejoinders; upon which circumstance she founded her opinion, that servants were an ungrateful and rebellious class, and the lower orders generally a dangerous set of persons, for whose good conduct the police were by no means a sufficient guarantee; she placed her confidence only in the military and 'guns.'

The *Hillsborough Arms* was certainly not an attractive caravansera. It stood in the High Street of the little village, and in no way different in appearance from the cottages on either side of it, except by its possession of a sign.

'This will never, *never* do!' ejaculated Mrs Marshall, but in a low tone, for she stood in awe of that rude man, the driver, and was secretly convinced that he was in an advanced stage of intoxication; 'not master of himself, my dear,' as she confided to Mrs Pennant; 'capable of any atrocity.'

Mr Winthrop had lagged behind, and was at that moment looking down the road, like another Sister Anne, for that something for which he had sent back his groom; but Frederick and Mr Flint at once left the carriage, and made their way into the apartment, which evidently formed both parlour and kitchen of the little inn.

'Can you give us some lunch, my good woman?' inquired Mr Pennant of the landlady, a thin and poverty-stricken widow, with three small children, who, to look at her, should have been her grandchildren, crowding about her as she superintended some culinary operation at the fire.

'Nay, sir,' was the civil reply; 'we have nought but bread and cheese; and, since you have ladies with you, not a room as you can well sit in, I fear.'

'Oh, we are not particular about the room,' said Frederick doubtfully. Then he went out to the ladies, and bade them make themselves as comfortable within as circumstances permitted, while he went on to the other inn, to see whether it offered better accommodation.

'I think we had better purchase what we can here, and eat it in the open air,' suggested Mrs Pennant softly.

'That is much the best plan,' cried Mrs Marshall; 'I am sure I should be suffocated in such a hovel.'

She spoke so loudly that Mabel felt sure that the poor woman, whom she could see through the open window, must needs have heard the observation; and she jumped lightly down, and entered the house at once. Her heart was naturally tender, and constant intercourse with the poor folks about her home, so far from blunting her sympathy for them, as not seldom happens, had only shaped it aright. The insolent patronage that some persons exhibit towards their social inferiors was scarcely more impossible to her than the callous indifference of others. She felt the divine truth of the modern parable of 'the insect on the leaf and its brethren in the dust' as deeply as he who wrote it and preached upon that text his whole life long. Though the daughter of a clergyman, she was not religious in the ascetic or doctrinal sense, but her heart was full of the truest Christian piety—pity for the poor. This bright and beautiful girl, to whom pleasure and gaiety were so welcome, was always ready to minister to the wants of a whimpering grandam, or to still the cries of a sick child, in scenes of sordid squalor, from which taste, and even delicacy, shrank appalled. England has her Sisters of Charity,

though not in uniform—mere volunteers, called out on only occasional service, Garibaldians of God; who fight the battle of Faith and Love as bravely as those in the regular army—and May Denham was one of them.

'No fish?' the Professor was saying as she entered the inn kitchen, 'and your village within so few miles from the sea-shore? Why, that is most extraordinary!'

'There's plenty fish caught, sir, but it all goes to Shingleton for the quality; we never taste it here.'

'Well, you get the money for it, at all events,' pursued Mr Flint.

'The fishermen do, sir; but, then, you see I am not a fisherman.'

'But those who are such spend their money at your inn, my good woman; so the fish come to you after all in some form.'

In this lecture on political economy, Mabel perceived that Mr Flint had evidently quite forgotten the object of his visit.

'But what is that savoury something which is cooking yonder?' inquired she with her sweet smile, and pointing to a simmering saucepan.

'Oh, nothing as you'd eat, ma'am, or even look at,' replied the woman curtly, her manner altered for the worse at once: 'it's wolf-fish.'

'Wolf-fish! what's that?' exclaimed the Professor excitedly. 'I should like to see it, of all things. Dog-fish I know well, but wolf-fish?'

'Twas never used here except for manure before this year,' continued the woman in grumbling tones. 'But folks as lives in *hovels*'—and she glanced with indignation at Mabel as she laid stress upon the word—'must just eat what they can get, and be thankful too, or else the parson picks a quarrel with them.'

'The parson must be hard to please if he quarrels with *you*,' said Mabel softly, 'whose house is so beautifully clean, and whose children are so well behaved as yours appear to be. Those two fine boys look just of the same age; which is the elder?'

'Well, ma'am, unfortunately they are of the same age. It's bad enough, as my old man used to say, when children are born to poor folks at all; but when they "comes two at a time," it's enough to make one wish one's self unmarried.'

The relish with which the Professor received this homely joke, joined to Mabel's evident desire to conciliate, quite won over the aggrieved woman. She took off the saucepan lid, thereby exhibiting some shapeless substance, which might have been stewed tripe or veal; and when Mr Flint could make nothing of that, she entered a little scullery, and brought out of it a truculent but flabby object, at least four feet long, and with a head like a pantomime mask.

'There he is,' said she, 'as large as life, but not so ugly. That's the wolf-fish; and if you had to kill him with a chopper yourself before you cooked him, you would have less appetite for him than you have now.'

The Professor and Miss Mabel were still contemplating this unexpected spectacle—the latter with some alarm, the former with the profoundest satisfaction—when Mr Winthrop made his appearance at the door.

'My dear Miss Denham,' exclaimed he in accents of disgust, 'do, pray, come out of this horrible hut, where there are nothing, it seems, but monsters. I

am thankful to say we have obtained—that is, my son here has brought from Shingleton—something fit for human food!

At his elbow stood Horn Winthrop, devouring Mabel with his dark eyes. 'Your sister is waiting for you,' said he, 'and also the lunch.'

'We are coming directly,' said Mabel with confusion.—'Mr Flint, pray, take them away,' whispered she; 'for see how angry they make this poor woman.'

The landlady was in fact speechless with rage, caused by the air and look of young Winthrop, as much as by his father's offensive speech. She might have been, and probably was (as the latter subsequently termed her), 'a widow woman with a temper;' but the look of contemptuous disgust with which the younger of the visitors was surveying her little home and its belongings, would have been trying to any householder.

'You young blackguard!' roared she, 'how dare you?' and would doubtless have given him a much larger piece of her mind, had not the Professor hurried them out of doors.

'I am most distressed,' said Mabel, not offering to stir, but confronting her hostess's crimson face and flashing eyes with a look of pain and shame; 'I cannot say how sorry I am that you should have suffered this rudeness.'

'You are an honest girl, although you are a lady,' answered the woman earnestly. 'You have a kind heart, and I will give you a word of advice that may keep it from being broken: there is evil about your path, though it seems so smooth. I see it, I see it!' In the frenzy of her passion, she whirled the hideous object, which she still held in her hand, about her head, until she really looked like some malign professor of the black art. 'Beware of that young fellow yonder! He is your lover, is he not?'

'No, no!' said Mabel, more terrified lest the woman's words should be heard without, than at the really formidable appearance which she presented. 'You are quite mistaken. But pray, hush!'

'I am not mistaken,' answered the woman, sinking her voice to a hoarse whisper. 'Do you suppose because I live in a hovel, and eat wolf-fish, that I have no eyes? That man is your lover, I tell you; and beware of him, for he has a black heart—a black heart!' Hissing these last words through her teeth rather than articulating them, the woman dashed the fish down on the clean tiles, and resumed her occupation beside the fire; while Mabel, white as ashes, left the room; and not without difficulty, for she trembled in every limb, got into the carriage.

#### TRUFFLES.

THIS curious fungus has become an essential to the true gourmet. The 'dindon aux truffes' has spread from the home of gastronomy, France, to many parts of Europe. The 'pâté de foie gras,' with its mixture of truffles, is now imported to all quarters of the globe, so that we need not be surprised to hear that the price of the esteemed esculent has nearly doubled; what ten years ago was only worth six francs the kilogramme, now sells at fifteen francs. As in the case of other much-prized articles of food, such as oysters and lobsters, scientific men have turned their attention

to the cultivation of this delicacy; and M. Auguste Rousseau of Carpentras has succeeded in obtaining a successful result. It has been observed that in the south of Europe the truffle grows the best among the roots of the oak tree, which is now cultivated in large districts, not only for its value as timber, but also for this mushroom, so dear to gastronomists. Beneath this tree it acquires a perfume which is wanting when it vegetates in the roots of the hornbeam, beech, walnut, chestnut, or lilac, under all of which it is occasionally found; and, as many persons eat the truffle without exactly knowing what it is, a few details as to its peculiarities may not be without interest.

Instead of pushing its head through the grass, and dotting the green-sward with its pretty white circles, like our mushroom, it loves to hide from the light, and dwells entirely underground. The spores, or reproductive seeds, are in the interior, like those of the puff-ball, which grows to such an immense size in many parts of England. There are about twenty-one varieties of the tuber, the botanical name of the truffle; but of these there are only four which are valued as edibles, and are often confounded one with the other, and generally known as the black truffle. Two ripen in autumn, and are gathered at the beginning of winter; these are the black truffle, properly so called, and the winter truffle. The first, which is by far the most highly esteemed, is highly perfumed, and covered with little roughnesses; the interior tissue, of uniform black, is traversed by veins, which are white in an early stage, but grow red as growth advances. This kind is common in Italy, Provence, and Poitou; being occasionally, though rarely, found around Paris and in England. The winter truffle always grows in the same places, but is very inferior in quality. The two other kinds are developed during the course of the hot season; the one is named the summer truffle, the other the mesenteric. The first is common in Germany and the centre of France; it is covered with large tubercles; and the flesh, at first white, becomes brown, streaked with white veins. The latter, which is abundant in Italy, has a grayish-brown tissue with deep cavities, to which it owes its name, as bearing a resemblance to the mesenteric gland. These two kinds are often found in the neighbourhood of Paris—on the turf which covers the Côteau de Beauté, and the Terrasse de Charenton, in the Bois de Vincennes. At Apt, in the department of Vaucluse, they cut these varieties into thin slices, dry them, and export annually two hundred thousand kilogrammes. There is but one other variety that is eatable: it is the white truffle of Piedmont, which Napoleon I. preferred to any other.

These funguses, as a rule, grow on chalk soils, or where the chalk is mixed with clay. Like many others of their species, they must vegetate on decayed wood, and even certain kinds of wood, in particular the three species of oak known in France—the white oak of the south, the leaves of which dry on the tree during the winter; and the other two which shed their foliage. It is among the roots that these tubercles multiply the most, and acquire a perfume which makes them an object of desire. Besides this, another point is necessary: they can only grow in the midst of a plantation of trees, and yet, if it be too thick, and shadow the soil too strongly, the harvest diminishes; but, as the open glade increases,

the supply becomes more abundant. The mode of reproduction is that of all their tribe; when grown to maturity, they contain spores of extreme fineness, and as the truffle decays in the soil, these spores produce white filaments, or mycelia, as the botanists term them, which give birth to the young truffles. Although these facts are established by scientific investigation, a thousand curious prejudices are believed in by the peasants who cultivate and gather them; some asserting that it is a natural excrescence from the roots of the tree; others, that it is the result of the prick of some fly or other insect. The greater part are convinced that the truffle exists on the oak beneath which it is found, for which reason they call some truffle oaks, and others sterile oaks. Many are the errors and illusions concerning the matter; but the general conditions of the growth of truffles are now well ascertained. A rainy July and August much favours their advancement, and insures a productive harvest.

These points taken into consideration, it was but a step to set about their cultivation. M. Auguste Rousseau chose a suitable piece of ground, enclosing about four acres, and sowed upon it the acorns of the white and green oaks, at the foot of which truffles had been found. The acorns grew; and at the end of eight years, he gathered eight kilogrammes on two acres, which, at the price the truffle then fetched, gave a profit of twenty-three francs the acre. This has gradually increased, so that at the end of fifteen years, a piece of waste land, planted with oaks, produces three hundred and ninety francs the acre—nearly sixteen pounds; and the wood has still its value. Few efforts at cultivation give such good results with so little labour. Two interesting observations have been made during the time by M. Rousseau. The first is, that the truffles are more abundant, of finer flavour and size, at the foot of the green oak than of the ordinary kind; and secondly, that the tubercles are always found beneath those trees which bore them the year before, and which were marked with a white cross. The pigs, which are employed in the discovery of the root, always went direct to these trees, opening deep furrows in the soil with their snouts. When the animal has reached the truffle, the attendant gives it a blow on the nose, and throws it some acorns or potatoes, as a satisfaction for its trouble. Though the scent of this animal is so little refined as regards sweet perfumes, it is always aware of the truffle beneath the soil, and more sensible than ourselves, perceives its subtle emanations. Some dogs, particularly spaniels, may be trained to this kind of work, but they can only mark the place where the truffle is to be found; whilst the pig, on the contrary, does the work, and uncovers and raises the dainty from its place of concealment. Man's selfishness, which substitutes a coarse kind of food for the delicacy it expects, does not discourage it; but the attendant must be on the alert, else the precious morsel is instantly crushed between its powerful jaws, which he tries in vain to open with his stick and rescue the prey.

The increase of the growth of oaks in the south of France has become an established fact. In the market of Carpentras alone there are annually sold truffles to the amount of two million francs, which are sent over the whole of Europe. The communes of Bedouin, Villes, &c., have truffle-

woods covering above five hundred acres, and yielding a sum of thirteen thousand francs. The fertility of these plots lasts for twenty or thirty years; at the end of this time, the soil, over-shadowed and impervious to rain, becomes no longer favourable for the growth of the subterranean fungus. After this, the brushwood can be removed for fuel, or altogether cut down.

## AT THE MORGANS'.

## IN TWO CHAPTERS.—CHAPTER II.

I WAS wont after the fatigues of the day to smoke a pipe in the kitchen at the Morgans'. My acquaintance with old Becky, however, I'm bound to say, did not advance very much—for one reason, perhaps, that she could not or would not speak English, and my command of Welsh was certainly circumscribed. I had picked up a few words, and dealt these out very incessantly. Becky would nod and laugh, but she generally contented herself with replying 'Dim Sassenach,' let me address her in what tongue I would. She was heedful of my requirements, if no great cordiality characterised her bearing towards me. I was often tempted to suspect that Becky for one would not be sorry when the time arrived for my turning my back upon Llanberig. Still, she was noway deficient in those hospitable efforts for which Wales is noted, and at what may be called 'cottage cooking'—for the little farm-house did not really pretend to much more—Becky was supreme. The breakfasts and suppers she prepared for my consumption were perfect in their way.

'When I was at Cardiff, I did not care for malt liquors. You find the ale to your liking? I'm glad of that. It seems to me rather poor stuff. I only wish I could offer you something more worthy of your drinking. In my time I've drunk of the best—the very best. We had a fine stock of very choice wines at Cardiff; there was no one to compare with us in the whole principality; we did an excellent business. I might have driven my carriage, if I had been so minded. The best of everything was to be found at my table: some of the wines that I was able to set before my guests were unique—quite unique—though I say it. But times are changed—times are sadly changed.'

Davy Morgan was the speaker. I had returned from the works rather earlier than usual; the men had 'knocked off,' and made half-holiday—I forget now the precise reason for this proceeding, but I'm inclined to think that there was some election business on hand. One of my directors had, I know, been canvassing the county, or a division of it, with a view to representing it in parliament. Very likely the nomination or the polling came off about this period, and the aid of my navvies—as many of them as could be mustered—had been solicited to keep or to break the peace—to assault or to protect the electors, I'm not sure which. I have no doubt that, well supplied and fortified with beer, they did all that was required of them, and probably something more. Elections were often rather wild and desperate work in that part of the country, and generally tended to the increase of Dr Jenkins's list of patients. However, I was not much interested in the matter—the proceedings were carried on, indeed, at a considerable distance from Llanberig—so I had returned to the farm



some hours in advance of my usual time, and Becky, quickly interpreting my pantomimic request for refreshment, had just supplied my wants, when Davy entered, conversationally inclined in regard to his past life as a wine-merchant at Cardiff.

He sighed as he finished speaking, and passed his hand across his forehead. He seemed somewhat moved and distressed by the nature of his reminiscences. I settled in my own mind that he had seen better days, and that a collapse had at some time or other afflicted the flourishing business at Cardiff. Somehow, very flourishing businesses, I've noticed, have a curious predisposition to collapse. I quietly continued the process of emptying my jug of beer.

'I daresay, now, you've tasted very good wine in your time?' he said presently.

I replied that, for a poor man, leading rather a rough and uncertain life, I had upon the whole done very fairly in that respect. I had sat at rich men's feasts now and then, and found myself fronted by very excellent drinks.

'You don't prefer beer to wine, then?'

I avowed that I did not, while admitting the admirable character of the malt liquor in the jug on the table—as good a brew of malt, I said, as a man could wish to drink.

'And you've a good palate for wine—for port wine, say?'

I thought I was fairly provided for as to palate, and knew a good glass of wine when I found one. He seemed to grow more and more interested in the conversation—to be even somewhat excited by it. He came quite close up to me as he said: 'May I ask, now, if you have ever tasted Comet Port?'

I said I believed that upon some special occasion—probably at some City Company's dinner, so far as I could recollect, but I wasn't quite sure—I had tasted, as a curiosity, some port wine so described. I owned that I was by no means certain that it was really the wine it affected to be; but that I had found it unquestionably a wine of very distinguished quality, I was quite prepared to assert.

He hardly seemed satisfied with this statement; he shook his head gravely.

'It's not a thing there could be any doubt or mistake about,' he said. 'If you once tasted Comet Port, you'd remember it all your life. There's nothing like it in the world; there never has been—there never will be. It defies description. There never was such a vintage as the comet year—the Great Comet year. We were most fortunate at Cardiff; we secured a wonderful cellar of Comet Port.'

He mentioned the number of pipes, but I don't feel quite confident now about the figure stated. I know that I thought it very considerable.

'But we didn't set enough store upon it,' he proceeded; 'that was where we were wrong. We were really wasteful with it. We were too good-natured; we let every customer have it that asked for it; at a good price, look you—I don't say otherwise—but nothing to what we might afterwards have obtained for it. We ought to have locked it up securely, as they lock up the crown-jewels in the Tower of London. I've seen them there myself; for, as a young man, I was often in London. We ought to have slammed the cellar-doors in the face even of our best customers, and

never have parted with so much as a teaspoonful. Our stock of Comet Port would now be worth a fabulous price—quite a fabulous price! But'—He stopped, as though he had forgotten what he was about to add, or had failed to find adequate words wherewith to express himself.

'Do you know anything of astronomy?' he asked suddenly.

I admitted that I was by no means well skilled in that science.

After a pause, during which he eyed me rather curiously I thought, he proceeded: 'There can be no harm in mentioning it now. I'm an old man; I've given up business this many a year; I can never hope now to see my plans carried out. But it was a grand—a startling idea. It occurred to me quite suddenly. I was busy about something else at the time, I remember. We were getting nearly to the end of our stock of the wine, though we'd raised the price of it almost exorbitantly. Every bottle was numbered, and specially sealed with blue wax, impressed with the initials of the firm. I cried as though at the loss of a friend whenever a bottle left the cellar. Then the question flashed into my mind: Why not make some more Comet Port?'

I was rather surprised. Still, I had heard a good deal of the tricks of the wine-trade. I said that possibly the thing was feasible; and that by some means, no doubt, a passable sort of Comet Port might be manufactured.

'Yes,' he cried impetuously; 'but by what means? Why, in this way. To make Comet Port, we must make comets!'

'Make comets!' I echoed.

'Yes. How? you'll ask. That was my secret—my discovery. The effect of the comet upon the vines was incontestable. Nor only the vines. The crops of all kinds were amazingly abundant everywhere. It was even said that there were more children born that year than were ever known to have been born before within a similar period—especially twins. There were repeated instances, indeed, of no less than four children at one birth; three at a birth were not unusual; twins were quite common. It was said, moreover, that there was not a single wasp that year, and that all the flies were quite blind. That I'm not quite prepared to believe; but certainly it was a most phenomenal season. The effects resulting from the comet were altogether of a very striking kind. Well, then, I argued, why not imitate the cause? Why not invent—create a precisely identical cause? call in the aid of art and ingenuity, and stimulate nature to further developments?' He laid his hand upon my shoulder as he spoke, and lowered his voice to a hoarse agitated whisper. I could see that he was greatly excited. 'It's an astronomical question. What's a comet, but a star surrounded by a gaseous inflammable matter, that by some chance or strange agency has become ignited! You've only to survey the heavens on a clear night to perceive numberless stars circled by luminous gas—by nebulous matter. These would all become comets if the gaseous air about them could only be thoroughly ignited. I've watched them night after night, hoping that by some accident they would clash together, or approach each other so nearly as to set fire to each other. They never did. Yet they were so near to each other oftentimes, that it seemed quite a miracle that there wasn't a whole



series of conflagrations in the heavens. Thousands of comets! How it would have affected the grapes! what port we should have had!

He had now raised his voice, and was talking very violently indeed, accompanying his speech by very impassioned action. A certain uncomfortable feeling came over me in regard to him. I looked up, and saw Becky in the doorway, with an expression of alarm and amazement upon her face. Her hands were upraised, and her wide-open eyes were fixed upon Davy. She ejaculated some sentences in Welsh, and then hurried away. It seemed to me that I could hear her calling across the farmyard to Griff Morgan.

'Well,' Davy continued, 'why not set fire to the stars? That was my plan. I meant to have taken out a patent for it, but I fell ill before I could quite complete my experiments, and make sure of the best way of carrying my notion into execution. I spent heaps of money on it; but I did not care for that—success was certain in the end. I sent up rockets first—fired them out of cannon; but I could not send them up high enough—they just missed the stars by a few yards. Then I tried fire-balloons; but the small ones failed—they ran before the wind without mounting sufficiently. Then I determined to construct a fire-balloon of colossal proportions'—

'Davy!' said a severe warning voice. Old Griff had entered the room. He laid his hand upon his brother's arm with a peculiar look of earnest, almost severe reproach. Davy stopped speaking, trembled, drew himself up, and covered his eyes with his hand. He then suffered himself to be led gently from the room. He stopped in the doorway, however, and bowed to me with a sort of bewildered politeness. Griff had firm hold of him, I perceived, and had no intention of releasing him until he was fairly away from my presence.

Becky eyed me indignantly and rebukingly, I thought. I was reconciled to the fact that conversation was not possible between us.

It was clear that Davy was out of his mind!

I saw no more of the brothers that day; but early the next morning, as I was setting forth for the railway works, I met Griff a few yards from the farm-house. I think he had been waiting for me, for usually, at that hour, he had been busy on his land at a considerable distance. He looked pale and distressed, his hands shook, and he walked feebly.

'Poor Davy was not well, sir, last night,' he said. 'I'm sorry you should have been troubled with his talking. It happens so at times with him, but not often. It was unlucky my being out of the way; but one of the cows was bad, and I was seeing to doctoring her at the moment. I think Davy had been to the ale-cask; I've always cautioned Becky to be watchful about his doing that; for he gets over-excited and troublesome, and hardly knows what he says, if he takes but ever so little more than he's accustomed to. We're obliged to allowance him; and he submits generally with very good-will. He's better now, but we had a trying night with him. He couldn't sleep, and his talk was worse than I've known it for a long time. He was feverish, and fidgety, and rambling all the night through. It's made me feel anxious, and shaken myself this morning. You'll judge, sir, that Davy's a little weak in his head now and then. But he'll not be for troubling you

any more. It's over now, and you'll kindly forget it, sir, if you please. I'll not keep you, sir; I'm walking your way down towards the works.—There's allowance for to be made for Davy, sir. He's proud of his Cardiff days; and really he was doing very well there—quite a rich man, I may say—till his—his health—he shrunk from saying *mind*, I noticed—till his health gave way. Still, he likes for to talk of his old days, when he can get any one for to listen. I check him always when I can, for it carries him too far, and isn't at all good for him.' He made no further reference to what was evidently his brother's monomania. He had spoken all through with hesitation, as though the subject pained him, and every now and then he raised his hat, and dabbed his forehead with his handkerchief. I had never seen him looking so old, and ill, and infirm as he looked that morning.

We had now approached the limits of his land. In the distance, I could see the tall, ragged, brown embankment my men were busy about, with, on its crest, a string of earth-wagons drawn along the tramway by a puffing 'donkey-engine.' Certainly, civilisation was spoiling the prospect. It was a lovely country: with distant ranges of hills, in deep blue waves, undulating along the horizon; with sudden down-plunging valleys, musical with running and falling water; and here and there, high-climbing groves of fir trees, shedding around them a delightful, moist fragrant shade. It was a fine landscape, affluent in natural beauties of form and colour. And we were, so to say, marring the picture by our cruel engineering cuttings and slashings. Well, we were not the first to bring the detriment of progress upon the place, at anyrate. The restless chatter and jangle of machinery were already to be heard echoing among the hills. The factories, the first invaders, had occupied the land very completely. The elevated ground in all directions was striped with long lines of blue-white flannel, stretched out in wooden frames, to dry and bleach in the open air. The railway had come in, as the obsequious yet indispensable servant of manufacture.

I was about to spring over a stile, and make a short cut across country to the works, when old Griff laid his hand on my arm. 'You're never going across the White Field?' he said in a quavering voice.

'Why not? It's the nearest way, and there's no crop on it to damage. You've let it lie fallow until it's a forest of stinging nettles. Why don't you plough it?'

'I daren't,' he said.

I turned towards him: there was a strange wild scared look in his face, and he was trembling all over.

'I know what I'm saying,' he continued. 'I daren't plough it; I wouldn't even venture to scratch the surface with my walking-stick.'

'Why not?'

'The land there's as thin as an egg-shell—there's just a mere coating of chalk upon it. I wouldn't so much as set foot on it for worlds; it would give way under the slightest weight, like pie-crust, and let you through!'

'Where to?'

'The bottomless pit!' he cried passionately. 'The world's hollow, you know—this is a weak place in its crust—the poorest, thinnest land in the whole country. It isn't safe; it would crackle under you like thin ice. I put up a board to warn people off,

but it was blown down by the wind, or carried away by some mischievous person. I know what I'm saying,' he repeated wildly. 'If I'm mad—and I've been called so—it's not on this point. The White Field wouldn't bear the weight of a man—no, nor of a child. I sometimes watch, for hours together, to see the birds fall through; but it bears them—it's as much as it can do. At least I never saw one go in. The rooks avoid it; they're so cunning, you see. I've watched them for hours, sometimes, hovering over it, but never alighting; and I hear them call out, warning the young birds of their peril. It's a terrible thing having the bottomless pit so near one's house—within a stone's throw of it almost. It's not the case with any other farm in the country. Don't 'ee cross it! Don't 'ee venture, now, dear young man, for the love of Heaven! I'd never forgive myself, if harm were to befall you on my land!'

It was plain that Griff was as mad as Davy. The doctor was right: they were 'queer folk' indeed.

I humoured the old man. I had crossed the White Field scores of times—I need not say without harm coming of it. This morning, I avoided it, gaining the railway works by a less direct route. I left old Griff leaning over the stile, gazing with frightened eyes at the terrible thin land that covered so unsafely the hollow of the earth—the bottomless pit.

There was not much inclination for industry on the line, I found: the election proceedings had in every way demoralised my army of navvies. There was again an early 'knock off,' and a hurrying away to the numberless beer-shops which always spring up, mushroom-like, on the path of a railway.

On my return to the farm, I was surprised to hear the sound of angry talking in the kitchen. The brothers were quarrelling. Becky was in vain endeavouring to pacify them. They were upbraiding and expostulating with each other. There was something of frenzy in the vehemence of their speech and action. They spoke partly in Welsh, partly in English. I could only gather from their controversy that they were engaged in mutual taunts, in which the words 'Comet' and 'White Field' largely figured.

'Why, what's all this about?' demanded a deep firm voice, and Dr Jenkins, his Mackintosh flapping and rustling around him, strode into the kitchen. The noise had been so great that the clatter of his pony's hoofs on the road to the house had not been heard. The old men were silent in a moment. Their faces were still inflamed with anger, but they looked humbled and penitent, and they eyed the doctor appealingly—deprecating his reprehension.

'Is this the way you keep your promise, Griff?—Is this being true to your word, Davy? Is this how you behave before a visitor? I thought I knew you, and could trust you better. I'm quite ashamed of you both.—This, Griff, your care of poor Davy!—This, Davy, your care of poor Griff! I wouldn't have believed it of you. No, not a word. Go to each other. Never, never let me hear of such a thing happening again.'

He spoke to them as a schoolmaster might speak to two disobedient child-scholars. They were much moved. They burst into tears. 'Davy!' cried Griff. 'Griff!' cried Davy. In a moment the old men were in each other's arms.

The doctor motioned me to step outside the door with him.

'I'm afraid I must advise you to clear out of this, and look for some other quarters. It's been too much for them—I was half afraid of it all along. But they'd been so well for so long that there seemed no great harm in running the risk. I've been so busy, and the distance is so great, or I should have been round here before now, to see how they were going on. It's my fault; I ought to have managed better.'

'They're both mad,' I said rather superfluously.

'Mad as March hares, both of them, and have been so for years. You've heard all about the Comet Port and the White Field, and all the rest of it?—Ah! I was afraid so. Poor old boys! the excitement of your coming, you see, upset them. A very little will do it, you know, in these cases; any one would think that. The quiet monotony of their usual life would be enough to drive a sane man mad; it would me for one, I know—supposing I'm sane, to begin with; but it keeps these poor mad folk sane. I told you they were rather queer, you remember. Their mother died raving mad, poor soul! They were both in the county asylum for some years. There had been too much intermarrying among the family, it was said. Though, if that's true, there must be a good many stark mad people passing for sane in the principality, for we're a rare people for in-breeding. But Griff and Davy were found so quiet and harmless at the asylum, that it was thought hardly worth while to keep them there any longer. I'm one of the visiting surgeons, and I strongly advised their discharge. They've gone on wonderfully well up to now. Each was instructed and required to look after and care for the other. That gave them an object in life, a duty to fulfil; and the effect upon them has been excellent altogether. Each believes himself sane, and knows the other to be mad, and a strong affection exists between them. I was in hopes that we'd brought them thoroughly round, and that they'd jog on comfortably to the end of their days. That wasn't to be, it seems. But they'll get all right again, I think, if we leave them to themselves; only, we must remove the exciting cause—that's you, you know. They've been overtaxing themselves, to do you honour—been inclined to shew off a bit, I take it, and so got into mischief. I sometimes think with these twin-born folk that there's only one sane mind between them; that they're all right so long as they keep together, a mutual support and check upon each other. But directly they split, and set up for having separate interests and intelligences, something goes wrong with them. It's a theory of mine, but I own not to having worked it out very thoroughly, even to satisfying myself in regard to it. But I'm inclined to think there is something in it. We'll go in, in another minute; depend upon it, we shall find them as quiet as lambs, very sorry for what's happened; and more than ordinarily watchful over each other. Still, it's better to run no further risk; we must manage to find some other quarters for you.'

When we re-entered the house, we found the brothers peaceably reading aloud alternate verses from the Welsh Testament.

I left Llanberig almost immediately. Indeed, the progress of the works had rendered necessary my further movement down the line. I only expedited

my departure by a day or two. I was on excellent terms with my hosts when I quitted the farm. There was not the slightest hint of any return of their mania. They were wonderfully courteous and cordial in bidding adieu to me. My last glimpse of them left them standing close together, waving their hats to me, Griff his wideawake, and Davy his chimney-pot, as I turned my back upon the farm. I even managed at last to conciliate Becky, in some degree—chiefly, I think, by abandoning the neighbourhood.

It was years afterwards when I learned from the doctor some tidings of my twin-hosts. They had passed away quite peacefully, untroubled by any revisitation of their malady. Davy had first departed, but Griff survived him only a few days. One grave held them both in the tiny little hill-side churchyard of Llanberig. Much sympathy had attended them in the neighbourhood, and they died affectionately regretted. They sleep tranquilly under the tender shade of a superb old far-reaching yew-tree. The farm is now in other hands, its proprietors still boasting the name of Morgan, however. And the White Field has been ploughed over and over again, without, as far as I could learn, anybody sinking in much above the ankles.

### THE MONTH :

#### SCIENCE AND ARTS.

AN American engineer points out that a great economy might be effected in manufacturing districts by the use of compressed air, and supplying horse-power from a central condenser, instead of each factory having a separate steam-engine, as at present. He recommends the laying of a large 'pneumatic main,' after the manner of a gas main, from which any manufacturer could be furnished with all the power he required; the quantity to be indicated by a meter. He could, of course, regulate the supply to suit his business, and increase or diminish at pleasure. Besides which there would be no danger of boiler explosions, or of fire; smoke would be avoided, and the cost of water to feed a boiler would be saved. If any enterprising inventor desires fame and fortune, let him devise a way to turn this 'notion' to practical account. In the large forges near Birmingham, each hearth, instead of a bellows to itself, receives from a central fan a blast, which, by opening or closing a valve at the rear of the fire, may be turned on or off at pleasure; and in this may be found a suggestion for the application of condensed air on a great scale.

The Americans, as well as ourselves, are making preparations for observation of the transit of Venus in 1874; and among them Professor Winlock of Harvard College has contrived a method of celestial photography which yields excellent pictures. He has a tin tube forty feet in length, supported horizontally north and south, with a lens of six inches aperture, and forty feet focal length at the northern end, and the southern end carried into a small dark house. This house serves as a photographic dark chamber, and is furnished accordingly. A little in advance of the northern end, a slightly wedge-shaped plate of glass is mounted so as to follow the sun, and throw the reflection constantly on the lens. With the apparatus thus prepared, an image of the sun four inches diameter is pro-

duced on the sensitive plate; and so greatly are all the errors of the lens reduced by the long focus, that pictures admirable for their definition and representation of details have been obtained. From these experiments, it is anticipated that this apparatus will render important service when the time comes for observation of the transit.

As related to this subject, we mention that Professor Zollner has invented a combination of spectroscope and telescope, by which an artificial total eclipse can be produced at any time when the sky is clear; the red protuberances then become visible, and can be seen all round the sun under circumstances favourable for examination and study.

Angström of Upsala finds thirteen metals in the sun in addition to hydrogen, and he is led to believe that the sun has few elements which are not found on our earth.

It is well known that in different parts of the world there are people who eat earth; among them are some of the natives of Java, who eat a red kind of earth as a luxury. This earth, which is soft and smooth to the touch, has been analysed by a German chemist, who finds it very rich in iron, with a small quantity of potassa and soda. Some tribes eat earth to stay the pangs of hunger by filling their stomachs, and because at times they can get nothing better; but the people in Java eat their earth, baked in thin cakes, as an agreeable variety in their general diet. The cakes, when slightly moistened, are rich and unctuous, and the enjoyment in eating is supposed to consist in the sensation produced by a fatty substance. It is a curious fact in the history of human habits.

To most persons the preserved meat question will be much more interesting than that of clay-eating. The contents of a cask of fresh beef, brought from Rosario in the Argentine Republic, were opened four months after it was put on board ship, and found perfectly sweet in appearance and taste. They had been dipped into a solution of bisulphite of lime, which, after cooking, left, as is said, no chemical flavour. This experiment is regarded as having settled the question as to the feasibility of importing fresh meat from South America. Another way is talked of—namely, packing meat without any chemical preparation in abundance of ice, which would not be difficult, seeing that a machine has been invented in the United States by which a hundred tons of clear, firm ice can be manufactured every day. Fill a ship's hold with ice, and fresh meat packed therein might be carried a long voyage in good condition. In addition to this prospect of a supply of beef, there is the pease-sausage invented by Mr Warriner, instructor in cooking to the army. It is described as an improvement on the similar preparation, of which seventy-five thousand, weighing one pound each, are made every day for the German armies. The peas are prepared in such a way as to remove the fixed air they contain; and seven pounds of the pease-sausage, mixed with forty-nine pounds of water, produce six gallons of excellent soup. These vegetable sausages will, as is said, keep a long time; and it is in their favour that peas, according to the chemists, contain some of the nutritious properties of meat.

There is good news for all who make use of water. A bill is to be brought before parliament in the coming session, by which the Companies



who provide London with water will be required to give a constant supply, and to improve the quality. Should this bill become law, the health of the metropolis ought also to shew an improvement; for, by far too often, the quality of the water supplied in some districts of London has been very bad. By the proposed bill, the rights of all the Companies may be bought, if considered expedient, and the whole management may be confided to one central body. If the year 1871 should bring to Londoners pure water, always 'on,' it may take rank with 1870 and its grand measure of education.

The measure, however, should be extended to the whole country, for the Medical Officer of the Privy Council has proved that typhoid fever, which at present kills from fifteen to eighteen thousand persons every year in England, might be entirely prevented by taking care that drinking-water should be absolutely free from the foul matters of common sewers. That typhoid fever is directly traceable to foul water, has been proved over and over again. One case is horribly instructive. The excreta from a fever-patient leaked into a well: a milkman mixed this well-water with his milk, and in every house at which he sold the milk one or more persons fell ill with typhoid fever. We are tempted to ask: Can such things be in a nation calling itself civilised? especially as various means exist by which the contamination of water can be prevented. The subject is one to which public attention should be unceasingly directed.

If cleanliness is, as some folk say, one of the arts, all that helps it should be made known. Doors, walls, or anything that is painted, may be cleaned with a piece of soft flannel, dipped in warm water, then wrung, and sprinkled with finely powdered French chalk. The paint on being rubbed with this will become quite clean, and will be saved from the destructive action of soap.

A professor at Munich has published the results of his experience on the seasoning of wood, which, as a practical question, is worth attention in many quarters. Growing-wood, he says, contains in winter about 50 per cent. of water, in March and April 46, and 48 per cent. in the next three months, with but little variation up to November. Timber dried in the air holds from 20 to 25 per cent. of water: never less than 10 per cent. Wood dried by artificial means until all moisture is expelled, is deprived of its elasticity, and becomes brittle. If the natural qualities of the wood are to be preserved, the drying must begin at a moderate heat, and be carried on very slowly. For the drying of small pieces of wood, such as are used by joiners and cabinet-makers, the professor recommends a bath of dry sand, heated to a temperature not exceeding one hundred degrees. The sand diffuses the heat, and absorbs moisture; but it must be cold when the wood is first buried therein.

Another practical discovery has been made in Germany—namely, that a mixture of glue and glycerine makes good rollers for printers.

Black-lead pencil drawings, or charcoal drawings, may be fixed by a process which involves but little expense or trouble. Thus: Prepare a solution in moderate strength of bleached shell-lac in alcohol: wash over the back of the sheet of paper with this, and the drawing on the front will become fixed. In this way, as will be understood, there is no risk of smearing the lines of the drawing.

A paper read at a recent meeting of the Institution of Mechanical Engineers, on Self-acting Machinery for knitting Hosiery, supplies another to the many striking comparisons that have been made between hand-work and machine-work. A skilled knitter, using the ordinary needles, will knit sixty loops or stitches in a minute; a frame-work knitter, with his hand-frame, knits about 5400 stitches in a minute; but three of the self-acting machines, described in the paper, which can be attended to by one girl, will knit 40,500 stitches in a minute. After this, we need not wonder that Leicester can weave stockings enough to supply the world.

Professor Listing of Göttingen, in an article on certain optical phenomena, explains why birds are so often found dead under telegraph wires. It is not, as is popularly believed, that they were killed by a passing current while perched on the wires, but because, their eyes being in the same horizontal plane, they cannot calculate their distance from the wires, and are consequently killed by flying against them. It is to this same fact—the horizontal plane—that the difficulty of distinguishing the edges of the steps occurs while going down stairs, and of clearly calculating the distance from one to another.

For some years past, government has been much in want of competent civil engineers for India, where the sum expended yearly on public works amounts to more than seven million pounds. The young men who have come up for examination have proved so lamentably ignorant, that those who pass are always below the number required, although the examination is by no means a difficult one. To meet this evil, the Secretary of State for India is to establish an Indian Civil Engineering College at Cooper's Hill, a few miles south-west of London, where young men are to study the subjects that concern a civil engineer, during three years; at the end of which period, if they have proved themselves worthy, they will be sent to India to commence their duties on a salary of four hundred and twenty pounds a year. For those who have brains, and can and will work, this project opens a gratifying prospect; but to those who trust in cram, it will be an effectual bar.

#### A LESSON.

Last night I weighed, quite wearied out,  
The question that perplexes still;  
And that sad spirit we call doubt  
Made the good nought beside the ill.

This morning, when with rested mind  
I try again the self-same theme,  
The whole is altered, and I find  
The balance turned, the good supreme.

A little sleep, a brief night's rest,  
Has changed the look of all that is!  
Sure any creed I hold at best  
Needs humble holding after this.

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